

ORDINANCE NO. 11-2992

National Electrical Code

AN ORDINANCE AMENDING CHAPTER 22 OF THE CITY OF BEDFORD CODE OF ORDINANCES, "BUILDING AND BUILDING REGULATIONS" BY REPEALING ORDINANCE NO.08-2914 ENTITLED "ARTICLE VII ELECTRICAL CODE" AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT THEREWITH AND CREATING A NEW "ARTICLE IV NATIONAL ELECTRICAL CODE" PROVIDING FOR THE ADOPTION OF THE NATIONAL ELECTRICAL CODE, 2011 EDITION; PROVIDING FOR THE ADOPTION OF ANNEX CHAPTERS; PROVIDING FOR THE ADOPTION OF REGIONAL AMENDMENTS TO THE NATIONAL ELECTRICAL CODE; PROVIDING CHANGING AND AMENDING ARTICLE IV; PROVIDING A SEVERABILITY CLAUSE, PROVIDING A PENALTY AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Bedford has operated on the same electrical code and code amendments since the adoption of the 2008 Edition of the National Electrical Code; and,

WHEREAS, the City Council of Bedford, Texas, desires to adopt the most current edition of the National Electrical Code as allowed by the Texas Legislature, and further desires to adopt regional amendments to said National Electrical Code; and,

WHEREAS, the City Council of Bedford, Texas finds and determines that the National Electrical Code and regional amendments adopted hereby will promote the health, safety and general welfare of the citizens of the City of Bedford, Texas.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BEDFORD, TEXAS:

SECTION 1. That Chapter 22 "Building and Building Regulations", Article VII "Electrical Codes" of the Bedford Code of Ordinances, is amended and which shall hereafter be and read as follows:

ARTICLE IV NATIONAL ELECTRICAL CODE / AMENDMENTS

**Sec 22- 200 National Electrical Code Adoption**

The National Electrical Code, 2011 edition as published by the National Fire Protection Association, a copy of which is on file in the office of the City secretary is hereby adopted by reference. Unless deleted, amended, expanded or otherwise changed herein, all provisions of such Code shall be fully applicable and binding; providing for the issuance of permits and the collection of fees thereof.

**Sec 22- 201 Amendments to the National Electrical Code**

The following sections of the National Electrical Code are hereby amended to read as follows:

**1. \*\*\*Article 100, Part I; amend the following definition:**

**Intersystem Bonding Termination.** A device that provides a means for connecting bonding conductors for communication systems and other systems such as metallic gas piping systems to the grounding electrode system.

**2. \*\*\*Article 110.2; change the following to read as follows:**

**110.2 Approval.** The conductors and equipment required or permitted by this Code shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third party inspection agency approved by the AHJ.

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third party inspection agency approved by the AHJ.

Manufacturer's self-certification of any equipment shall not be used as a basis for approval by the AHJ.

Informational Note: See 90.7, Examination of Equipment for Safety, and 110.3, Examination, Identification, Installation, and Use of Equipment. See definitions of *Approved*, *Identified*, *Labeled*, and *Listed*.

3. **\*\*Article 230.71(A); add the following exception:**

Exception: Multi-occupant buildings. Individual service disconnecting means is limited to six for each occupant. The number of individual disconnects at one location may exceed six.

4. **\*\*\*Article 240.91; delete the Article.**

5. **\*\*Article 300.11; add the following exception:**

Exception: Ceiling grid support wires may be used for structural supports when the associated wiring is located in that area, not more than two raceways or cables supported per wire, with a maximum nominal metric designation 16 (trade size 1/2").

6. **\*\*Article 310.10; add subsection (J) to read as follows:**

**310.10 (J) Aluminum Wire.** Conductors in this article shall be of copper, unless otherwise specified and approved by the authority having jurisdiction.

Exception: Utility companies are permitted to use aluminum conductors to a point of termination of the public utility system.

7. **\*\*Article 310.15(B)(7); change to read as follows:**

**(7) 120/240-Volt, 3-Wire, Single-Phase Dwelling Services and Feeders.** For dwelling units, conductors, as listed in Table 310.15(B)(7), shall be...*{text unchanged}*...provided the requirements of 215.2, 220.61, and 230.42 are met. This Article shall not be used in conjunction with 220.82.

8. **\*\*Article 500.8(A)(3); change to read as follows:**

**500.8 Equipment.** Articles 500 through 504 require equipment construction and installation standards that ensure safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance.

Informational Note No. 2: Since there is no consistent relationship between explosion properties and ignition temperature, the two are independent requirements.

Informational Note No. 3: Low ambient conditions require special consideration. Explosion proof or dust-ignition proof equipment may not be suitable for use at temperatures lower than -25°C (-13°F) unless they are identified for low-temperature service. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified as Class I, Division 1 at normal ambient temperature.

**(A) Suitability.** Suitability of identified equipment shall be determined by one of the following:

- (1) Equipment listing or labeling
- (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation
- (3) Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or an ~~owner's~~ engineering judgment signed and sealed by a qualified Licensed Professional Engineer.

Informational Note: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information. Guidelines for certificates may be found in ANSI/ISA 12.00.02, *Certificate Standard for AEx Equipment for Hazardous (Classified) Locations*.

**9. \*\*Article 505.7(A) changed to read as follows:**

**505.7 Special Precaution.** Article 505 requires equipment construction and installation that ensures safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to the installation and maintenance of electrical equipment in hazardous (classified) locations.

Informational Note No. 2: Low ambient conditions require special consideration. Electrical equipment depending on the protection techniques described by 505.8(A) may not be suitable for use at temperatures lower than -20°C (-4°F) unless they are identified for use at lower temperatures. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified Class I, Zones 0, 1, or 2 at normal ambient temperature.

**(A) Implementation of Zone Classification System.** Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by a qualified persons Licensed Professional Engineer.

**10. \*\*\*Article 680.25(A) changed to read as follows:**

**680.25 Feeders.** These provisions shall apply to any feeder on the supply side of panelboards supplying branch circuits for pool equipment covered in Part II of this article and on the load side of the service equipment or the source of a separately derived system.

**(A) Wiring Methods.**

**(1) Feeders.** Feeders shall be installed in rigid metal conduit or intermediate metal conduit. The following wiring methods shall be permitted if not subject to physical damage:

- (1) Liquidtight flexible nonmetallic conduit
- (2) Rigid polyvinyl chloride conduit
- (3) Reinforced thermosetting resin conduit
- (4) Electrical metallic tubing where installed on or within a building
- (5) Electrical nonmetallic tubing where installed within a building
- (6) Type MC cable where installed within a building and if not subject to corrosive environment
- (7) Nonmetallic-sheathed cable
- (8) Type SE cable

*Exception: An existing feeder between an existing remote panelboard and service equipment shall be permitted to run in flexible metal conduit or an approved cable assembly that includes an equipment grounding conductor within its outer sheath. The equipment grounding conductor shall comply with 250.24(A)(5).*

**Section 22- 202 Temporary Utilities**

When for good and sufficient cause it is necessary to have utilities turned on any installation before final certificate can be issued, the building official may authorize a temporary permit to be issued for a period of 30 days.

**SECTION 2. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined a sum not to exceed the maximum permissible by state law and a separate offense shall be deemed committed upon each day during or on which a violation occurs or continues**

- SECTION 3.** It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.
- SECTION 4.** This ordinance shall become effective upon passage and publication in accordance with laws of the State of Texas and the Charter of the City of Bedford.
- SECTION 5.** That all ordinances or any parts thereof in conflict with the terms of this ordinance shall be and hereby are deemed repealed and of no force or effect; provided, however, that the ordinance or ordinances under which the cases currently filed and pending in the Municipal Court of the City of Bedford, Texas, shall be deemed repealed only when all such cases filed and pending under such ordinance or ordinances have been disposed of by a final conviction or a finding not guilty or nolo contendere, or dismissal.
- SECTION 6.** If any section, article, paragraph, sentence, clause, phrase or word in this ordinance, or application thereto, to any person or circumstance, is held invalid or unconstitutional by a Court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this ordinance; and the City Council hereby declares it would have passed such remaining portions of the ordinance despite such invalidity which remaining portions shall remain in full force and effect.

**PASSED AND APPROVED** this 22nd day of March 2011, by a vote of 6 ayes, 0 nays and 0 abstentions, at a regular meeting of the City Council of the City of Bedford, Texas.

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Jim Story, Mayor

**ATTEST:**

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Michael Wells, City Secretary

**APPROVED AS TO FORM:**

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Stan Lowry, City Attorney